US-131 Interchange @ 44th Street, JN 51902C

Question 1
Is the Environmental Assessment for this project available for review?

Answer 1
Yes, this document was developed by the City of Wyoming, and is available for review. Please see the attached Adobe file.

JOHN ENGLER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

GREGORY J. ROSINE
DIRECTOR

June 24, 2002

Mr. Gerald Snyder
Engineer
City of Wyoming
1155 28th Street, S.W.-Box 905
Wyoming, Michigan 49509-0905

Mr. Wayne Harrall
Director of Engineering
Kent County Road Commission
1500 Scribner Ave., NW
Grand Rapids, Michigan 49504

Gentlemen:

Finding of No Significant Impact
44th Street from Clyde Park to Eastern Avenue
Kent County, Michigan

The environmental phase of the subject project has been completed and resulted in a Finding of No Significant Impact. This finding provides you with location and design approval.

If you have questions regarding this information, feel free to contact me at (517) 335-0878. If you have design related concerns, you may contact Mr. Doug Needham of this office at (517) 373-9450.

Sincerely,

Gonzalo Puente, P.E.
Project Development Engineer
Local Agency Programs

Enclosure

cc: Theresa Petko, URS
Doug Needham, Local Agency Programs/Design

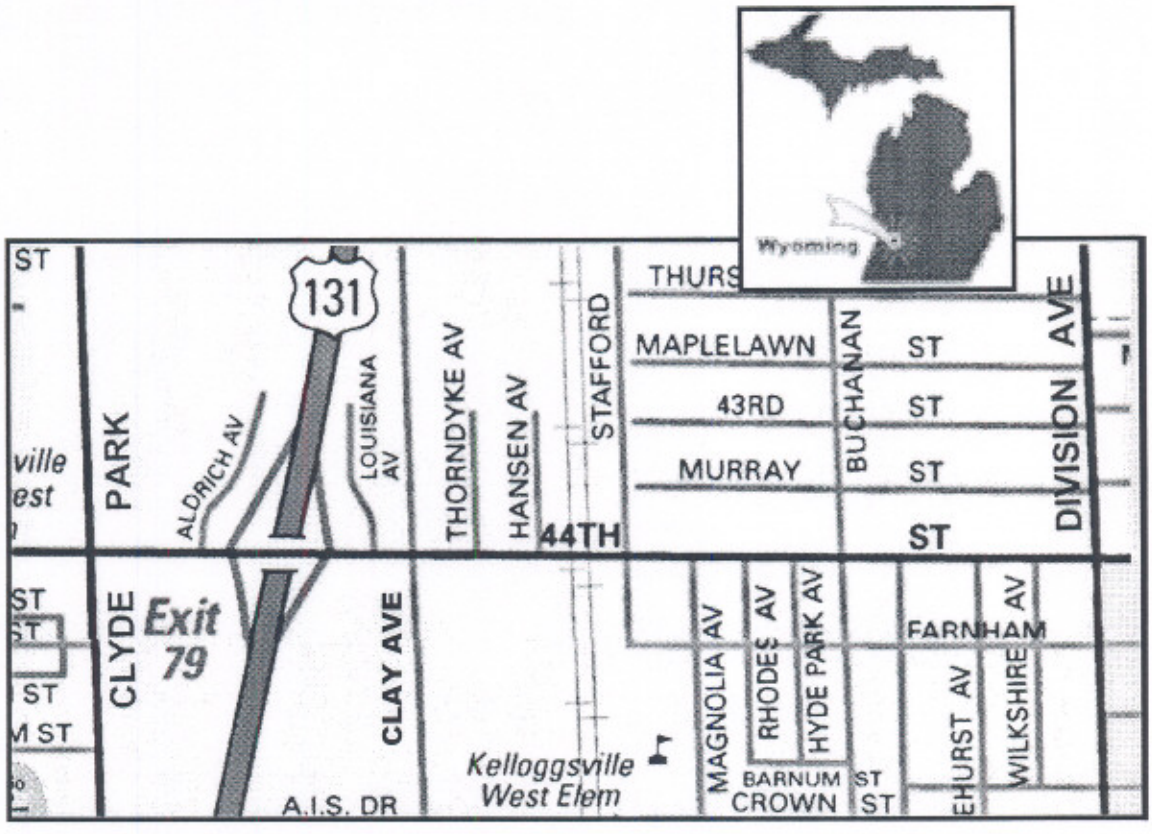
Federal Highway Administration
Finding of No Significant Impact
for
44th Street Widening and Reconstruction
Kent County, Michigan

The Federal Highway Administration (FHWA) has determined this project will not have any significant impacts on the human or natural environment. This Finding of No Significant Impact is based on the attached Environmental Assessment which has been independently evaluated by the FHWA and determined to be adequate and accurately discuss the environmental issues and impacts of the proposed project.

The proposed project will require the purchase of additional right-of-way. At least 33 residences and 24 commercial properties will be affected. All of the requirements of the Federal Uniform Relocation Assistance and Real Acquisition Act of 1970 as amended, will be met. The Public Involvement process has been complied with.

The Environmental Assessment provides sufficient evidence and analysis for determining an environmental impact statement is not required. The FHWA takes full responsibility for the accuracy, scope, and content of the attached Environmental Assessment.

6/14/02	[signature]	Field Operations Group Leader
Date	Responsible Official	Title



44th Street from Clyde Park Avenue to Eastern Avenue
in the Cities of Wyoming and Kentwood, Kent County, Michigan

ENVIRONMENTAL ASSESSMENT

SECTION 4(f) EVALUATION

February 2002

Submitted Pursuant to 42 U.S.C. 4332 (2)(c),
and 23 CFR 771 by:

U.S. Department
of Transportation
Federal Highway
Administration

Kent County
Road Commission

City of Wyoming

ENVIRONMENTAL ASSESSMENT
SECTION 4(f) EVALUATION

for the Proposed Widening of
44th Street from Clyde Park Avenue to Eastern Avenue
in the Cities of Wyoming and Kentwood, Kent County, Michigan

Prepared by the
Kent County Road Commission and City of Wyoming
in Cooperation with the
Michigan Department of Transportation, and the
Federal Highway Administration

APPROVED:

_____ _____

Date for the Federal Highway Administration

ABSTRACT

This project consists of the widening of 44th Street between Clyde Park Avenue and Eastern Avenue in the cities of Wyoming and Kentwood. On the eastern mile of the project, the proposal is to maintain four lanes but widen to include a median. The proposal for the western mile is to widen the existing facility to six lanes. Improvements to the 44th Street/US-131 interchange will be phased in at a future date to coincide with bridge repairs and coordination with the Michigan Department of Transportation (MDOT). Construction will be coordinated after the completion of M-6. Traffic will be maintained during construction.

PREFACE

The National Environmental Policy Act (NEPA) of 1969 requires that social, economic, and natural environmental impacts of any proposed action of the federal government be analyzed for decision-making and public information purposes. There are three classes of action. Class I Actions, which are those that may significantly affect the environment, require the preparation of an Environmental Impact Statement (EIS). Class II Actions (Categorical Exclusions) are those that do not individually or cumulatively have a significant impact on the environment and do not require the preparation of an EIS or an Environmental Assessment (EA). Class III Actions are those in which the significance of impacts is not clearly established. Class III Actions require the preparation of an EA to determine the significance of impacts and the appropriate environmental document to be prepared – either an EIS or a Finding of No Significant Impact (FONSI).

This document is an EA. It describes and analyzes a preferred alternative and the no action alternative and supports a determination that the preferred alternative will have no significant impacts. If review and comment by the public and interested agencies also support this determination, this EA will be forwarded to the Federal Highway Administration (FHWA) with a recommendation that a FONSI be prepared. If it is determined that the preferred alternative may have significant impacts, preparation of an EIS will be required.

This EA is for the proposed reconstruction of 44th Street from Clyde Park Avenue to Eastern Avenue. This is a main, east-west corridor for the Grand Rapids area, running from Ottawa County to the Gerald R. Ford International Airport. This EA was prepared through a consultant for the City of Wyoming and the Kent County Road Commission, in cooperation with the Michigan Department of Transportation.

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Section 1
PLANNING BASIS AND NEED FOR THE PROPOSED PROJECT

44th Street is a Principal Arterial running for 12 miles from east to west from Ottawa County to the Gerald R. Ford International Airport. The arterial serves a regional mall, industrial areas, and commercial areas, as well connecting collectors and local streets serving residential areas. Its eastern terminus is at the Gerald R. Ford International Airport and the Rivertown Crossing Mall on its western terminus.

The purpose of the proposed project is to reduce congestion and improve the traffic operations for safety for current and projected traffic conditions. The proposed improvements included in this Environmental Assessment will continue a multi-year improvement plan by the local road agencies and are among the last remaining segments needing improvement along the corridor. The recommended improvements are included in the Wyoming Thoroughfare Plan and the Grand Valley Metropolitan Council (GVMC) Area Long-Range Transportation Plan for the year 2025. The GVMC's 2001-2003 Transportation Improvement Program (TIP) includes the right-of-way acquisition for this project.

44th Street between Clyde Park and Eastern operates at unacceptable service levels. The completion of the South Beltline, running parallel to 44th Street and located approximately three miles to the south will not divert or lower traffic volumes along 44th Street to improve these congested conditions in the future. The recommended improvements will enable traffic to operate within acceptable levels of service, improve the safety and impact the adjacent property the least.

1.1 Traffic Information

Existing traffic volumes are 49,000 vehicles per day (vpd) from Clyde Park to US-131, 53,000 vpd from US-131 to Clay, and 45,000 vpd east of Clay. 44th Street is a designated truck route. Truck traffic averages six percent, including single unit trucks and tractor-trailer trucks. The existing roadway is four lanes with a level of service "F" throughout the project length. The posted speed limit is 35 mph. There is no on street parking allowed along 44th Street.

Modeling was conducted in conjunction with the 1998 Wyoming Thoroughfare Plan update to determine the projected growth in traffic along 44th Street. The modeling included the effects of the opening of the Rivertown Crossing Mall, to the west of the project location, and the opening of the M-6 South Belt in 2005, to the south of the project area. Traffic volumes on 44th east of US-31 increased by 24% between 1985 and 1996. Projected traffic volumes for 2020 from Clyde Park to Clay are 55,000 vpd. Projected traffic volumes for 2020 east of Clay are 45,000 vpd. With no roadway improvements, the level of service for this area would remain an "F." The poor level of service is contributing to higher-than-average crash rates, lost time, spill over to residential streets, congestion-related excess fuel consumption, and congestion-related hydrocarbon emissions.

1.2 Crash Analysis

The crash rate along 44th Street between Clyde Park and Eastern is higher than the statewide average. Between Clyde Park and Clay, the crash rate is more than three times the statewide average. The crash rate east of Clay ranges from ten percent to 75 percent higher than the statewide average. The intersections of 44th Street with the US-131 southbound and northbound ramps are the two highest crash locations in the City of Wyoming.

The most common crash types were angle and rear ends, representing 28% and 32% of the total crash types, respectively. This project will alleviate these types of crashes due to the improved boulevard design including indirect left turns.

Section 2
PROPOSED PROJECT

The Kent County Road Commission and the City of Wyoming propose to widen 44th Street from Clyde Park Avenue to Eastern Avenue. The widening is proposed to address the existing poor level of service ("F") throughout the project corridor.

2.1 Preferred Alternative: Widen 44th Street

With existing traffic volumes of 53,000 vehicles per day (vpd) and projected volumes of 55,000 vpd, a six lane section is recommended for the western mile of the project. This will allow operation at acceptable level of service through the year 2020. Even with the anticipated increase in traffic in 2020 on 44th Street, the level of service will improve from the current level of F to C. According to the Wyoming Thoroughfare Plan traffic volumes will increase in the future, despite the completion of M-6. Volume increases are due to background traffic as well as diversions expected from 36th Street.

In the eastern mile of the project, with existing and projected traffic volumes of 45,000 vpd, a four-lane boulevard section is recommended. Even with the anticipated increase in traffic in 2020 on 44th Street, the level of service will improve from the current level of F to C. According to statewide crash statistics from MDOT, the average crash rate from 5-lane, undivided, urban, free access facilities is 916 per 100 million vehicle miles traveled. The crash rate is reduced by 52% (or 436 crashes per 100 million vehicle miles traveled) with a four-lane boulevard design.

The recommended improvement includes bus turnouts for the 44th Street cross-town route. The improved level of service will allow improved transit operations along the 44th Street corridor. The proposed improvements are shown in Figures 1 through 7 on pages 3 through 9. In addition, a typical cross-section of the four and six lane design is shown in Figure 8.

The Preferred Alternative is scheduled to be completed in 2005 and 2006 as described in the TIP. The construction will occur after the completion of the M-6 project in that area. Improvements to the interchange at 44th Street and US-131 will be phased in at a future date.

The cost estimate for the Preferred Alternative is as follows:

- Right of Way $5,999,400
- Division to Eastern widen to 4 lane boulevard $3,200,000
- East and west of the US-131 Interchange to Clyde Park and Clay $750,000
- Clay to Division widen to 6 land boulevard $2,000,000

Total Project Cost Estimate $11,949,400

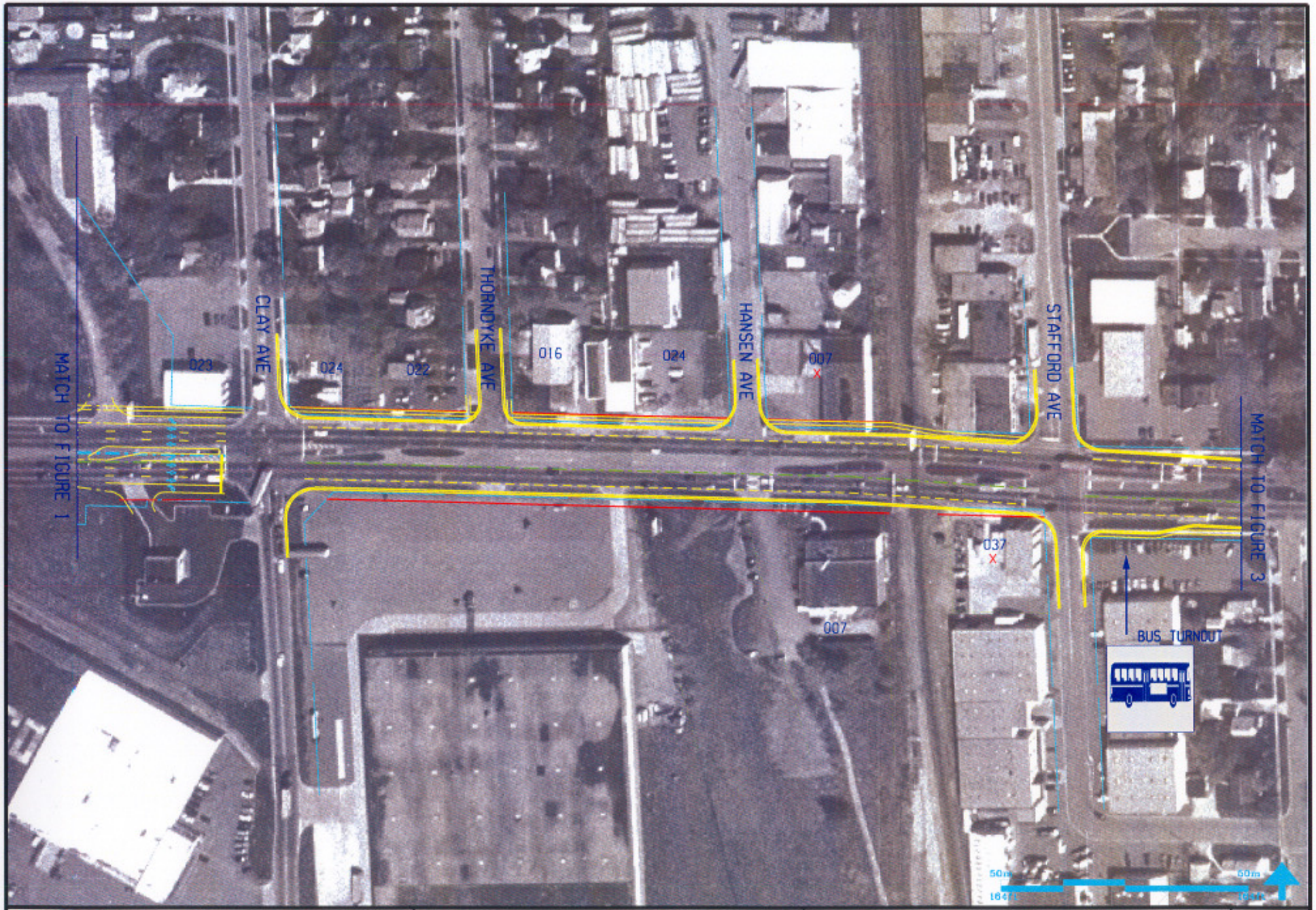
2.2 No Action

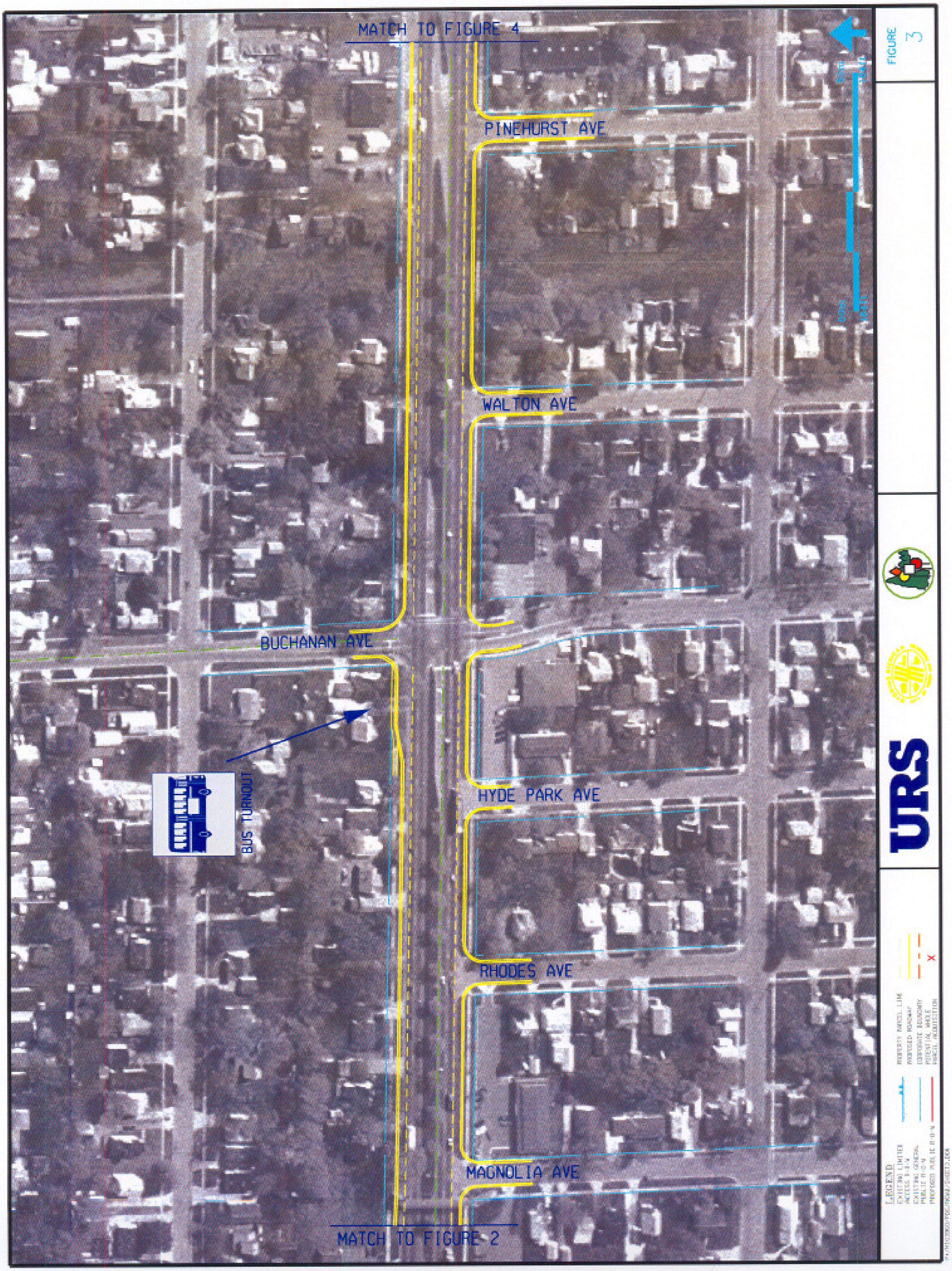
Leaving the roadway "as is" with only maintenance-type improvements will not address the current or future poor level of service and high crash rate.

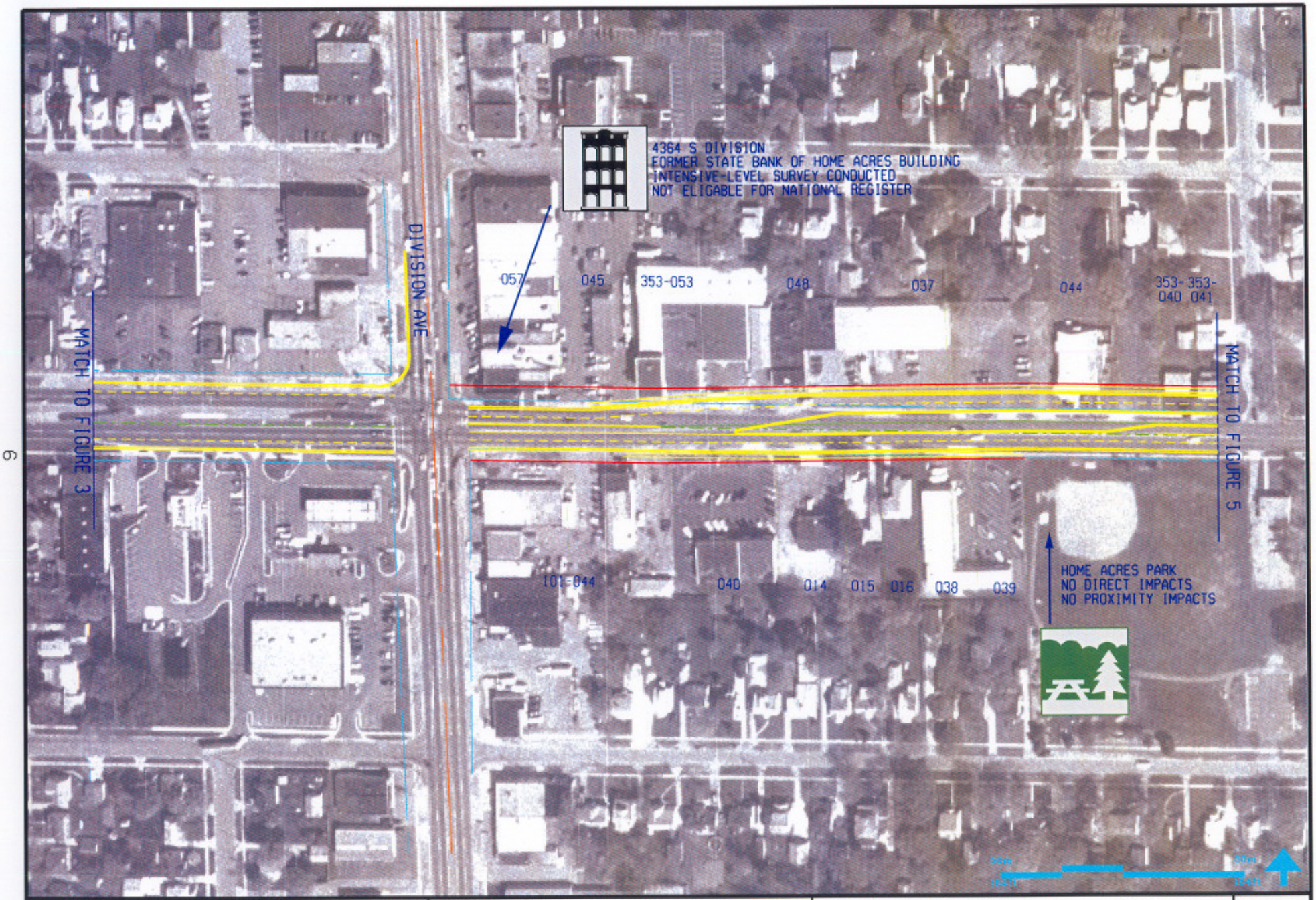
2.3 Other Alternatives Considered

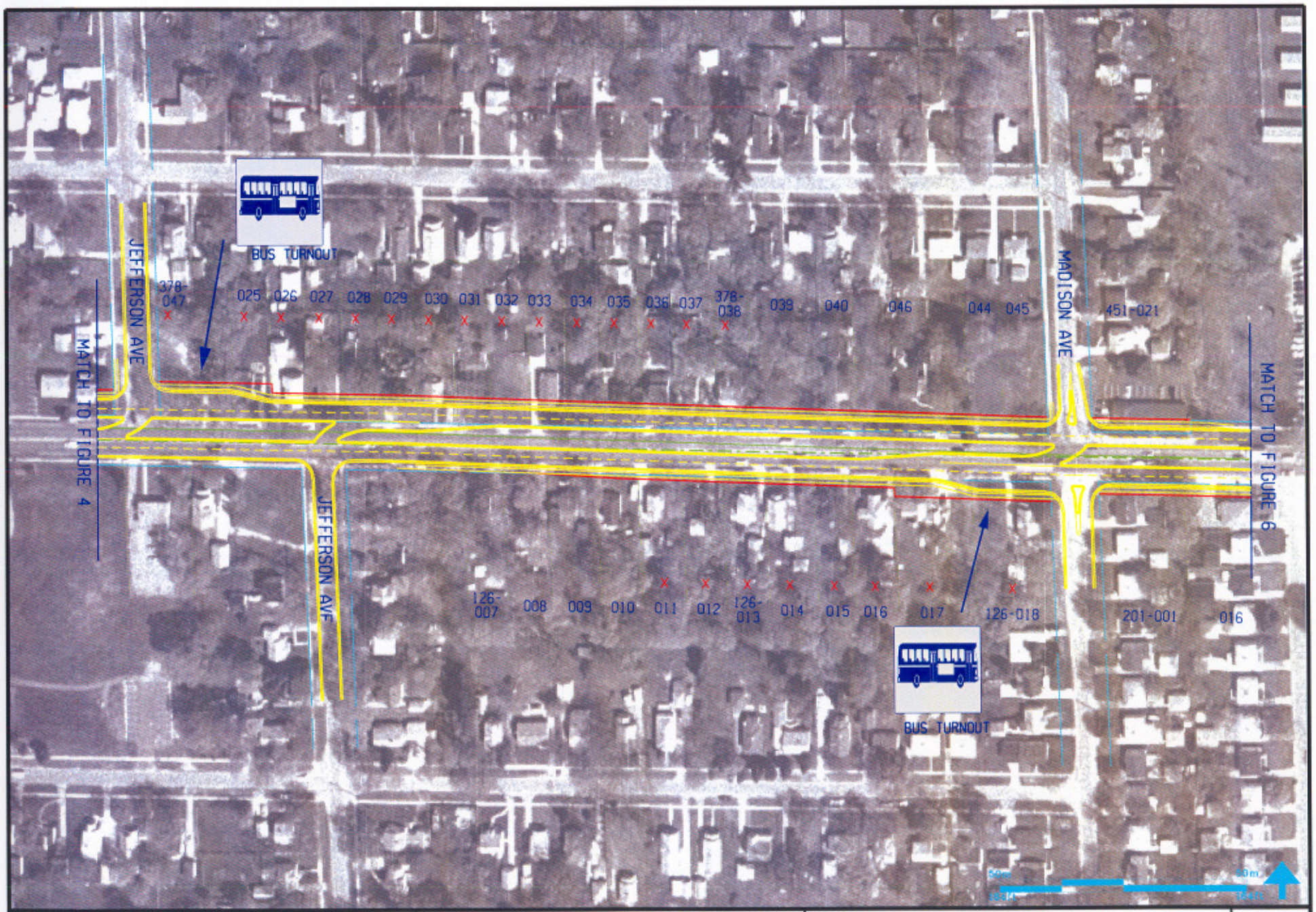
An undivided seven-lane section was considered in the Thoroughfare Plan. However, this was not recommended due to aesthetic concerns, lack of access control, and safety considerations. The undivided seven-lane alternative essentially carried the same potential impacts but would have a higher potential crash rate and would not address access control.


MATCH TO FIGURE 2
US-131
MANSEG
032
044
037
030
043
004
CLYDE PARK AVE
037
020
033
URS
FIGURE 1
LEGEND


CLAY AVE
THORNDYKE AVE
HANSEN AVE
STAFFORD AVE
MATCH TO FIGURE 1
MATCH TO FIGURE 3
023
024
022
016
024
007
037
007
BUS TURNOUT
50m
164ft
60m
LEGEND
EXISTING LIMITED ACCESS R-O-W
EXISTING GENERAL PUBLIC R-O-W
PROPOSED PUBLIC R-O-W
PROPERTY PARCEL LINE
PROPOSED ROADWAY
CORPORATE BOUNDARY
POTENTIAL WHOLE PARCEL ACQUISITION
URS
FIGURE
2


MATCH TO FIGURE 4
PINEHURST AVE
WALTON AVE
BUCHANAN AVE
HYDE PARK AVE
RHODES AVE
MAGNOLIA AVE
MATCH TO FIGURE 2
BUS TURNOUT
FIGURE 3
URS
LEGEND
EXISTING LIMITED ACCESS R-O-W
EXISTING GENERAL PUBLIC R-O-W
PROPOSED PUBLIC R-O-W
PROPERTY PARCEL LINE
PROPOSED ROADWAY
CORPORATE BOUNDARY
POTENTIAL WHOLE PARCEL ACQUISITION


4364 S DIVISION
FORMER STATE BANK OF HOME ACRES BUILDING
INTENSIVE-LEVEL SURVEY CONDUCTED
NOT ELIGABLE FOR NATIONAL REGISTER
DIVISION AVE
057
045
353-053
048
037
044
353-040
353-041
MATCH TO FIGURE 3
MATCH TO FIGURE 5
101-044
040
014
015
016
038
039
HOME ACRES PARK
NO DIRECT IMPACTS
NO PROXIMITY IMPACTS
LEGEND
EXISTING LIMITED ACCESS R-O-W
EXISTING GENERAL PUBLIC R-O-W
PROPOSED PUBLIC R-O-W
PROPERTY PARCEL LINE
PROPOSED ROADWAY
CORPORATE BOUNDARY
POTENTIAL WHOLE PARCEL ACQUISITION
URS
FIGURE
4


JEFFERSON AVE
MATCH TO FIGURE 4
BUS TURNOUT
378-047
025
026
027
028
029
030
031
032
033
034
035
036
037
378-038
039
040
046
044
045
MADISON AVE
451-021
MATCH TO FIGURE 6
JEFFERSON AVE
126-007
008
009
010
011
012
126-013
014
015
016
017
126-018
201-001
016
BUS TURNOUT
50m
30m
LEGEND
EXISTING LIMITED ACCESS R-O-W
EXISTING GENERAL PUBLIC R-O-W
PROPOSED PUBLIC R-O-W
PROPERTY PARCEL LINE
PROPOSED ROADWAY
CORPORATE BOUNDARY
POTENTIAL WHOLE PARCEL ACQUISITION
URS
FIGURE
5

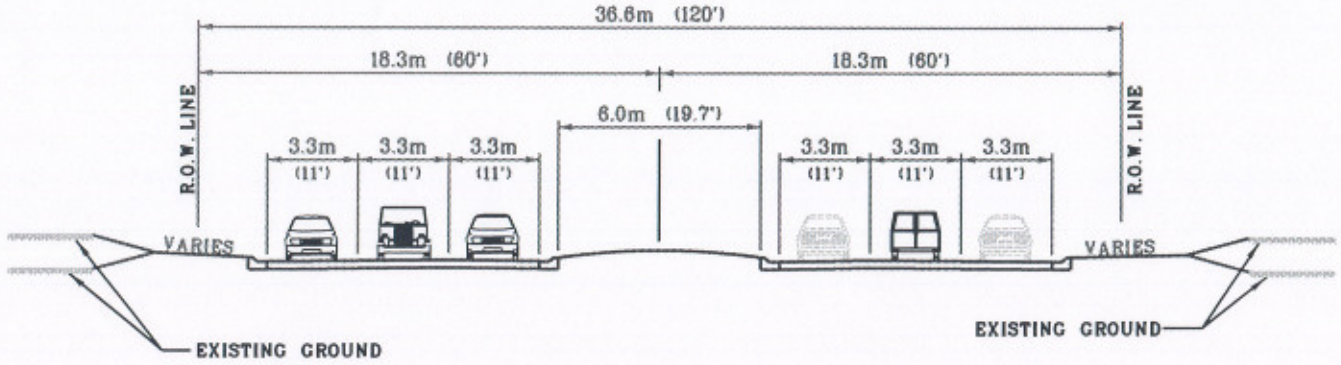
MATCH TO FIGURE 7
POTTER AVE
ROGER B. CHAFFEE MEMORIAL BLVD
JULIVAN AVE
2021-001
MATCH TO FIGURE 5
FIGURE 6
URS
LEGEND

LEGEND

EXISTING LIMITED ACCESS R-O-W
EXISTING GENERAL PUBLIC R-O-W
PROPOSED PUBLIC R-O-W
PROPERTY PARCEL LINE
PROPOSED ROADWAY
CORPORATE BOUNDARY
POTENTIAL WHOLE PARCEL ACQUISITION
X

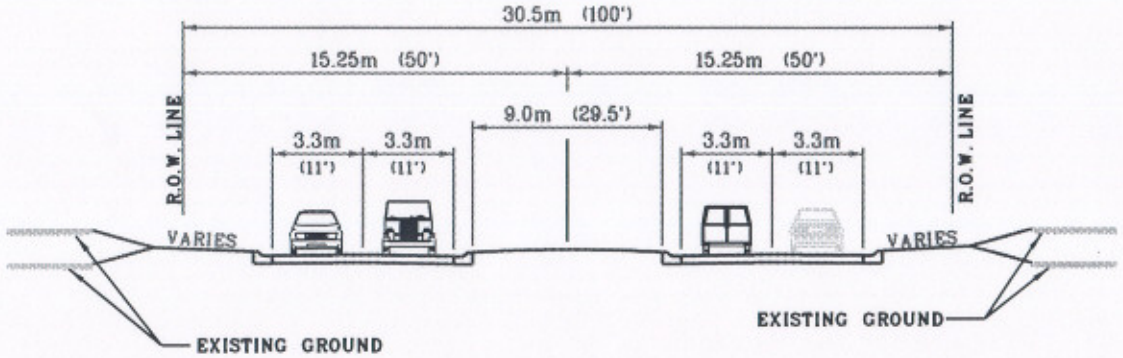
URS

FIGURE 7



TYPICAL 6-LANE BOULEVARD WITH CLOSED DRAINAGE

NOT TO SCALE



TYPICAL 4-LANE BOULEVARD WITH CLOSED DRAINAGE

NOT TO SCALE

PROPOSED 44TH STREET
TYPICAL CROSS SECTIONS

URS

FIGURE 8

P:\M103960\ROAD\TYP_XSEC.dgn

The City of Wyoming is proceeding with numerous Transportation System Management improvements such as computerized traffic control, signal timing optimization, additional turn lanes and access management planning along the corridor. These improvements will contribute to improved traffic flow, however, the traffic volumes and crash statistics point to the need for road improvements.

2.4 Public and Agency Involvement

Public and agency involvement has included:

- Meetings with the Grand Rapids Historian concerning the potential historic property in the northeast quadrant of 44th Street and Division Avenue
- Coordination with the U.S. Fish and Wildlife Service and the Michigan Department of Natural Resources concerning the potential for endangered species or critical habitat.
- Coordination with FHWA and MDOT on the proper procedures for submitting Environmental Assessments conducted by local agencies.
- Meeting with the Michigan Department of Environmental Quality concerning the potential for hazardous waste contamination along this project.

Prior to the Public Hearing, the Final Environmental Assessment was made available for agency and public review. A Public Hearing was held on March 26, 2002 at the Kelloggsville High School in Wyoming, Michigan to present the results of this study. Kelloggsville High School is close to the project corridor and is accessible per requirements of the Americans with Disabilities Act. The Public Hearing Transcript is contained in Appendix E and the Public Comments and Responses to Comments are contained in Appendix F of this document.

Section 3
AFFECTED ENVIRONMENT AND EXPECTED IMPACTS

City, county, consultant, and agency staff conducted a review of potential impacts, and those that had a reasonable possibility for individual or cumulative significant impacts were analyzed further. The results of this analysis are discussed below.

Note that the following categories had no involvement: Coastal Barrier Resources, Coastal Zone Management, Farmland Protection, Fish and Wildlife Coordination, Floodplains, Wetlands, and Wild and Scenic Rivers.

3.1 Air Quality

The FHWA has determined that the FY 2002 – 2004 Transportation Improvement Program (TIP) for the Grand Valley Metropolitan Council (GVMC), the Metropolitan Planning Organization (MPO) for Grand Rapids, conforms to the State Implementation Plan (SIP). The conformity determination was made on November 2, 2001. Since the project is part of the currently conforming TIP, this demonstrates the requirement of a project level conformity analysis (40 CFR Part 93 Subpart A of the Federal Clean Air Act).

3.2 Endangered Species

The U.S. Fish and Wildlife Service and the Michigan Department of Natural Resources were contacted to request a species list. The Service and MDNR advised that no listed or proposed species or critical habitat is present in the project influence area. Documentation of the contact and response are included in Appendix A.

3.3 Hazardous Waste

Thirteen (13) sites listed on the Michigan Department of Environmental Quality (MDEQ) or EPA Databases were identified within the project area. The project does not involve any sites on EPA's National Priority List. Based on a review of the available files at the MDEQ for the facilities identified within the project area, one facility has the potential to affect construction activities conducted during the project. This facility was identified as:

- Total #2602 – located at 4404 S. Eastern Avenue (southeast corner of 44th Street and Eastern Avenue). (See Figure 7 on page 9 of this EA.) Based on information contained within the MDEQ files, a release at this facility has resulted in subsurface petroleum contamination. A review of the most recent quarterly sampling results revealed that there is the potential for contamination from this facility to have migrated off-site and into the right-of-way of S. Eastern Avenue immediately south of 44th Street. Although the facility is currently undergoing remedial activities, further investigation is required to determine if petroleum contamination has impacted the project area. Note that the eastern terminus of the proposed construction for this project is considerably west of this property. No involvement with hazardous waste is expected.

A database summary of all sites in the project vicinity with entries on various agency databases pertaining to hazardous waste is available in Appendix A.

3.4 Highway Traffic Noise

Based on current FHWA procedures for highway traffic noise analysis and abatement that are contained in 23 CFR 772, the proposed project would be classified as a Type I project. A Type I project is defined as projects involving construction of a highway on a new location or the physical alteration of an existing highway which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes. A noise analysis is required for all Type I projects. As the western portion of the 44th Street project proposes the addition of through-traffic lanes, a noise analysis was conducted.

Highway Noise Fundamentals

The extent to which individuals are affected by noise sources is controlled by several factors, including:

- The duration and frequency of sound
- The distance between the sound source and the receptor
- The intervening natural or man-made barriers or structures
- The ambient environment

The level of highway traffic noise depends primarily upon:

- The volume of traffic
- The speed of traffic
- The number of trucks in the flow of traffic

Generally, heavier traffic volumes, higher speeds, and greater numbers of trucks increase traffic noise. Consequently, the Federal Highway Administration (FHWA) has established the following vehicle categories to use in traffic noise analysis:

- Heavy duty trucks, defined as vehicles having three or more axles
- Medium duty trucks, defined as vehicles with two axles and six wheels
- Automobiles, defined as vehicles with two axles and four wheels
- Buses
- Motorcycles

Heavy-duty trucks typically produce more noise than medium-duty trucks traveling at the same speed. Medium duty trucks, in turn, typically generate more noise than automobiles.

Traffic noise is measured and described according to FHWA guidelines, which prescribe the use of the hourly equivalent sound level (L_{eq} [h]) as the primary descriptor for noise analysis. L_{eq} (h) is defined as the equivalent steady state sound level, which in one hour contains the same acoustic energy as the time-varying sound level during the same one-hour period.

The unit of measure for the L_{eq} is the "A-weighted" decibel (dBA). The dBA scale de-emphasizes the very low and very high frequencies and emphasizes the middle frequencies, thereby closely approximating the frequency response of the human ear. Table 1 below, adapted from an AASHTO Guide, provides examples of common outdoor noise levels and their respective noise level decibels. To place the noise levels into a context that some people can more easily relate to, Table 1 also provides the equivalent common indoor noise levels.

Table 1 - Common Outdoor and Indoor Noise Levels[1]

Common Outdoor Noise Levels	Noise Level Decibels	Common Indoor Noise Levels
	110	Rock Band
Jet Fly Over at 305 meters (1,000 feet)	----	
	100	
Gas Lawn Mower at 3 feet	----	Inside Subway Train (NY)
	90	Food Blender at 1 meter (3 feet)
Diesel Truck at 50 feet	----	Garbage Disposal at 3 feet, or Shouting at 3 feet
Noisy Urban Daytime	80	
Gas Lawn Mower at 31 meters (100 feet)	----	
	70	Vacuum Cleaner at 3 meters (10 feet)
Commercial Area	----	Normal Speech at 1 meter (3 feet)
	60	Large Business Office

Quiet Urban Daytime	50	Dishwasher Next Room

Quiet Urban Nighttime	40	Small Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	----	Library
	30	Bedroom at Night
Quiet Rural Nighttime	----	Concert Hall (Background)
	20	
	----	Broadcast & Recording Studio
	10	
	----	Threshold of Hearing
	0	

[1] Source: *Guide on Evaluation and Attenuation of Traffic Noise*, American Association of State Highway and Transportation Officials, 1994.

Typically, noise level changes between 2 and 3 dBA are barely perceptible, while a change of 5 dBA is readily noticeable by most people. A 10-dBA increase is usually perceived as a doubling of loudness, and conversely, noise is perceived to be reduced by one-half when a sound level is reduced by 10 dBA.

Federal Noise Abatement Criteria

The determination of traffic noise impacts is based on the relationship between the ambient noise levels and the established noise abatement criteria for the Study Area. The effects of noise are judged in accordance with the Federal Highway Administration guidelines as established by 23 Code of Federal Regulations (CFR), Part 772 and current MDOT Policies. The Federal Noise Abatement Criteria (NAC) provided in Table 2 are based on specific land uses and are used in determining the need for studying noise attenuation measures. Approximately half of the Study Area evaluated in this report is Land Use Category B, which has a noise impact level of 67 dBA. Per FHWA NAC, a residence is considered "impacted" when traffic noise approaches or exceeds 67 dBA. Michigan Department of Transportation has define 66 dBA as the level approaching 67 dBA for Category B receptors. The remainder of the study area is primarily commercial and industrial land uses. These properties are included in the Category C, which has a noise impact level of 72 dBA.

Table 2 - Noise Abatement Criteria (NAC) Hourly A-Weighted Sound Level in Decibels (dBA)[1]

Activity Category	$L_{eq}(h)$	$L_{10}(h)$	Description of Activity Category
A	57 (Exterior)	60 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	70 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	75 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	--	--	Undeveloped lands.
E	52 (Interior)	55 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

[1] Either $L_{eq}(h)$ or $L_{10}(h)$ (but not both) may be used on a project. These sound levels are only to be used to determine impact. These are the absolute levels where abatement must be considered. Noise abatement should be designed to achieve a substantial noise reduction - not the noise abatement criteria.

Noise Sensitive Areas

Given the diversity of land uses in the Study Area, six (6) Noise Sensitive Areas (NSA) were developed to assist in the highway noise analysis. These six NSA along 44th Street are as follows:

NSA 1 – from Eastern Avenue to Roger B. Chaffee Memorial Drive
NSA 2 – the south side of 44th Street from Roger B. Chaffee Memorial Drive to Division Avenue
NSA 3 - the north side of 44th Street from Roger B. Chaffee Memorial Drive to Division Avenue
NSA 4 – from Division Avenue to Magnolia Avenue
NSA 5 – Magnolia Avenue to US 131
NSA 6 – US 131 to Clyde Park Avenue

A total of 24 receptor sites were selected for field measurement to provide representative sound levels throughout the NSA.

Noise Measurement Procedures

Noise measurements were conducted in accordance with techniques described in the FHWA Report No. FHWA-DP-45-1R, "Sound Procedures for Measuring Highway Noise." Metrosonics dB-3100 Integrated Sound Level Meters were used to monitor ambient noise levels for 1-hour periods. Location where measurements were collected were considered representative receptors of existing ambient noise levels throughout each NSA.

The sound level meters were operated on the A-weighted network and the slow meter response as recommended by the manufacturer. Measurements were not collected if roadway pavement was wet, or if wind speed exceeded 10 miles per hour. A porous windscreen was used on the sound level meter during all measurement procedures. All of the measurements were taken at ground level. For these measurements, the sound level meters were mounted approximately five feet above the ground surface. The height is generally considered representative of the average listener's ear level. Wherever possible, measurement sites were located in open areas away from buildings or other potentially reflective surfaces.

Measurements were collected throughout the day on April 18 and the morning of April 19, 2000. The existing on-site classified (autos, medium trucks, and heavy trucks) traffic data was recorded by hand to calibrate the modeling results to the measured noise levels.

Existing Peak Hour Noise Levels

In establishing the base condition, the existing 66-dBA contour line was identified for the Study Area. Using the calibrated traffic noise model, peak hour ambient noise levels were identified at several model locations throughout the six NSAs. Existing peak hour traffic data developed for the 44th Street Improvements Study was used as representative peak hour traffic. The 66-dBA contour line was developed by interpolating the between the noise levels at the modeled receptor sites. The location of the 66-dBA line is shown on Figure B3 (in Appendix B).

Impact Analysis

Impact analysis was performed in compliance with recommended FHWA and MDOT methodologies. Using the FHWA's Traffic Noise Model Version 1.0b (TNM), receptor sites within the study area were analyzed for the existing peak hour and proposed 2020 Build Alternative. Based on current and projected traffic levels, offset distances of the 66 contour lines from the centerline of the proposed alternative were predicted. The location of the 2020 Build 66 dBA contour line is shown on Figure B4 (in Appendix B). Category B sensitive sites falling within the 66 dBA contour were classified as impacted according to State and Federal noise abatement criteria. A substantial increase in predicted noise levels over the existing noise levels may be experienced, even though the NAC level is not exceeded. A substantial increase is defined by FHWA and MDOT to be 10 dBA or greater, which represents a doubling of the perceived noise level or more.

Summary of Impacts

Noise impacts for the Study Area were identified for each Noise Sensitive Area. These impacts have been identified based on FHWA and MDOT noise abatement criteria. A total of 24 receptor sites were selected for field measurement to provide representative sound levels throughout the NSA. In addition to the field measurement locations, an additional 73 receptor locations were modeled to determine the location of the 66 dBA contour line. There were no receptors experiencing a sound level increase of 10 dBA or more within the Study Area.

- **NSA 1**

NSA 1 consists of the areas north and south of 44th Street from Eastern Avenue to Julian Avenue. This area is a mixture of both commercial and industrial properties and falls under Category C of the noise abatement criteria. All of the properties within NSA 2 fall below the 72 dBA requirement for Category C, and therefore are not impacted.

- **NSA 2**

Proceeding west, 44th Street is made up of single family residences until the intersection of Division Avenue with commercial businesses located along 44th Street between Jefferson Avenue and Division Avenue. NSA 2 consists of the residential area south of 44th Street within this section. A community park with a baseball diamond is location just west of Jefferson Avenue. Access to the park is via Farnham Street, a residential street paralleling 44th Street.

A total of 20 residences are within the 66 dBA contour under existing conditions for NSA 2. After improvements to 44th Street, only 11 residences will remain within the 66 dBA contour. Of the original 20 properties impacted, 9 properties are being acquired as part of the 44th Street improvements. Associated with the acquisition of the 9 properties, the 66 dBA line shifts further south, however no additional residences are impacted. Of the remaining residences within the 66 dBA contour, the 66 dBA contour does not increase greater than 0.5 dBA. Typically, noise levels between 2 and 3 dBA are barely perceptible, while a change of 5 dBA is readily noticeable by most people. This change in

noise level is considered negligible, and therefore, there will be no additional noise impact resulting from this project.

As part of the improvements to 44th Street, the centerline for 44th Street was shifted to the north, holding the existing curb line to avoid impacts to the Community Park (Home Acres Park) located just west of Jefferson Avenue. However, the Community Park is currently and will continue to be within the 66 dBA contour for 44th Street. As with the residential properties remaining along 44th Street, the 66 dBA contour does not increase greater than 0.5 dBA. This change in noise level is considered negligible and should not impair the function of the park. Therefore, no additional noise impacts will result to the Community Park from this project.

- **NSA 3**

Proceeding west, 44th Street is made up of single family residences until the intersection of Division Avenue with commercial businesses located along 44th Street between Jefferson Avenue and Division Avenue. NSA 3 consists of the residential area north of 44th Street within this section. A total of 19 properties are within the 66 dBA contour under existing conditions for NSA 3. After improvements to 44th Street, only 4 residences will remain within the 66 dBA contour. Of the original 19 properties impacted, 15 properties are being acquired as part of the 44th Street improvements.

Associated with the acquisition of the 15 properties, the 66 dBA line shifts further north, however no additional residences are impacted. Of the remaining residences within the 66 dBA contour, the 66 dBA contour does increase greater than 0.5 dBA. Typically, noise levels between 2 and 3 dBA are barely perceptible, while a change of 5 dBA is readily noticeable by most people. This change in noise level is considered negligible, and therefore, there will be no additional noise impact resulting from this project.

- **NSA 4**

Within the City of Wyoming, NSA 4 is primarily residential from Division Avenue to Stafford Avenue. Commercial properties exist within the area primarily at both of the intersections of 44th Street with Division Avenue and Stafford Avenue. A total of 19 residences on the north side and 8 residences on the south side of 44th Street within NSA 4 are impacted by the 66 dBA contour. However, no improvements to 44th Street are occurring within this section and therefore no there will be no additional noise impact resulting from the project.

- **NSA 5 and NSA 6**

The remainder of the Study Area between Division Avenue and Clyde Park Avenue is primarily industrial and commercial with a small pocket of residential properties located on the north side of 44th Street between Hanson Avenue and US 131. NSA 5 covers the area from Division Avenue to US 131 and NSA 6 covers the area from US 131 to Clyde Park Avenue. The only residential land uses are located behind the commercial properties on the north side of 44th Street within NSA 5. None of the residential land-uses are impacted by the 66 dBA contour and therefore are not impacted. Also, the commercial and industrial land-uses for both NSA 5 and 6, fall below the 72 dBA requirement for Category C, and therefore are not impacted.

3.5 Historic Preservation

One resource–the former State Bank of Home Acres building at the northeast corner of 44th Street and Division Avenue–was identified within the project's Area of Potential Effect (APE) as potentially eligible for listing in the National Register. This two-story, brick-veneered, concrete-block building was inventoried at the intensive level and found to have been built in 1927, along with the connected row of commercial buildings that extends to its north along Division Avenue. The building has been determined ineligible for National Register listing under all of the Register's Criteria. It is not associated with the lives of historically significant individuals and the study of its physical components would be unlikely to yield any important historical information not readily available from other sources. The resource is therefore not eligible for National Register listing under Criteria B or D. The former bank building and its commercial row further possess neither the degree of significance nor integrity necessary to qualify for listing under Criteria A or C. A number of other individual contemporary buildings and commercial assemblages of buildings survive throughout Grand Rapids and its suburbs that display a higher degree of integrity and greater architectural noteworthiness than the bank and its row. A copy of the Intensive Level Report found in Appendix C.

An additional intensive level survey was completed along 44th Street between Clyde Park Avenue and Eastern Avenue that comprised the APE for this project (refer to Figure 9 for the project's APE). The results of this survey indicate that neither the residential nor the commercial resources within the APE are eligible for National Register listing. The results are contained in more detail in the Addendum Report contained in abbreviated form in Appendix C.

The State Historic Preservation Office (SHPO) has concurred that "no historic properties are affected within the APE" (see Appendix A, Coordination Letters).

3.6 Section 4(f)

Home Acres Park is located between Division and Eastern Avenues on the south side of 44th Street. The park includes a baseball diamond near the 44th Street right-of-way. No right of way is required from the park. Noise analysis determined there would be no proximity impact on the park since there would be no change in noise levels and the function of the park would not be impaired.

No recreation areas, wildlife or wildfowl refuges, or archeological sites are located within the area of potential effect for this project.

An intensive level survey was conducted on one site with potential eligibility for listing on the National Register. The intensive level survey found that the property is not eligible under any of the National Register Criteria. See Section 3.5 above.

3.7 Socio-Economic Impact

3.7.1 Land Use

No change in land use patterns will occur with this project. There will be no negative impact on development patterns.

3.7.2 Impacts on Community Facilities and Services

No community facilities such as schools, libraries, hospitals, or community centers are impacted by the proposed improvements.

Water, sanitary sewer, gas, telephone, and electrical transmission lines adjacent to or crossed by the project may require relocation or adjustment. If this should be the case, coordination between the MDOT and the affected utility company will take place during design and relocation will take place prior to construction of the road, if possible. The contractor will coordinate his construction activities with the affected utility companies.

Service to the project area may be temporarily interrupted during the adjustment period. However, the effects of this work will go largely unnoticed.

3.7.3 Social Impact

The proposed project will not cause any negative impacts on any minority, ethnic, low-income, elderly, or handicapped groups. No neighborhood will be separated from facilities or services. There will be no long-term negative impacts on area schools, churches, recreational areas, or police and fire protection facilities. Although there may be some temporary disruptions during construction, access for emergency vehicles will be provided for during the construction of the roadway. Information with regard to the best route for emergency vehicles to utilize during construction activities will be coordinated with the cities involved.

3.7.4 Maintaining Traffic During Construction

Construction of the proposed project will begin after completion of M-6 to allow for an alternate route for through traffic.

The western portion of the project (Clyde Park to Division) in the City of Wyoming will re-route through traffic to M-6 or to parallel principal arterials (such as 28th Street) or minor arterials (such as 36th Street). One lane in each direction will be maintained for local traffic and access will be maintained to all properties throughout construction.

The eastern portion of the project (Division to Eastern) in the City of Kentwood will also re-route through traffic to M-6 or to parallel principal arterials. One lane in each direction will be maintained for local traffic and access will be maintained to all properties throughout construction. The Kent County Road Commission used this construction and traffic maintenance plan for the project immediately east of this one on 44th Street.

These combined actions will minimize impacts to local businesses and residents during construction.

3.7.5 Environmental Justice

The purpose of Executive Order 12898 is to identify, address, and avoid disproportionately high and adverse human health or environmental effects on minority and low-income populations. Disproportionately high and adverse human health or environmental effects on minority and low-income populations are not anticipated as a result of this project. Access to businesses along the 44th Street will be maintained by way of access drives Site up by the City of Wyoming and the Road Comission.

In order to identify minority communities or low-income communities within the project area, the 1990 census files were researched to determine whether the median household income for residences in the project area is at or below the poverty threshold, and whether minority populations are present. Additionally, the communities adjacent to the project area were examined. Based on the census data and observations made during the visual examination of the project area, no disproportionate concentrations of low-income or minority populations are located within the project area.

However, as required by Executive Order 12898 on Federal Actions to Address Environmental Justice in Minority and Low-Income Populations, a continued effort will be made to identify such groups or individuals during the study of this project. If such groups are found, every effort will be made to actively involve them in the project development process, and to avoid any potential disproportionately adverse impacts that may result from the proposed project.

3.7.6 Property Acquisitions and Displacements

The widening of 44th Street to add through lanes in the western portion of the project and to develop a median in the eastern portion of the project will require the acquistion of residential and commercial properties. Acquistion required for the proposed improvements includes: 23 residential whole-parcel; 10 residential partial; 6 commercial whole-parcel; and, 18 commercial partial. The average right-of-way acquistion is ten feet on either side of the roadway. Whole-parcel acquistion is assumed where the commerial viability of the parcel would likely be lost due to acquisition of parking or a portion of a structure, or where residential properties no longer meet set-back requirements within Kentwood. Property acquistion is noted on Figures 1 through 7 (pages 3 through 9).

Regarding the availability of residential property, there is sufficient supply of existing homes, new home construction, and future planned development within a reasonable distance of the project to absorb the displacements as projected under the recommended alternative. Regarding commercial properties, the displacement of any businesses under the recommended alternative will not have any major, lasting economic, or generally disruptive effect on the communities or county. The displaced businesses, as is usually the case, will probably remain in business by acquiring a replacement site nearby. There are no displacements of public buildings or churches under the recommended widening. Appendix D contains the Conceptual Right of Way Relocation Plan.

3.7.7 Non-Motorized Traffic

44th Street is not a designated bicycle route.

Sidewalks will be reconstructed or constructed throughout the project length, including over US-131. The pedestrian movements through the interchange area will include protected pedestrian signal phasing. Where warranted throughout the project length, pedestrian activated signal buttons will be installed. The existing pedestrian overpass east of Stafford Avenue will remain. Sidewalk ramps at intersections will be reconstructed in compliance with the Americans with Disabilities Act (ADA).

3.7.8 Transit

The new regional transit association (Interurban Transit Partnership) is proposing a 44th Street cross-town route. Buses will run approximately every 20 minutes.

The recommended alternative proposes bus turnouts along 44th Street in the project vicinity in order to decrease traffic impacts caused by the buses. Two turnouts are proposed in each direction of travel. No additional impact to parcels is caused by the turnouts. Note that the 44th Street cross-town buses, proposed by the Interurban Transit Partnership, are not part of the 44th Street widening project.

3.8 Visual Impact

The widening of 44th Street will affect the appearance along 44th Street in two ways. First, the widened street will exhibit a more predominant visual role for motorists, pedestrians, and residents due to the larger expanse of pavement in the western half of the project compared to current conditions. Second, by adding the median – including grassy areas and trees – to the eastern half of the project, the visual buffer between each side of the roadway will be increased. The visual quality will be in keeping with the land uses in the corridor and the existing roadway appearance, plus provide continuity with the visual quality to the east of this project along 44th Street.

3.9 Water Quality

A significant increase in urban run-off is not expected as a result of the project activities. Drains will be relocated and/or constructed along the project area to drain the roadway subbase and intercept horizontal seepage. These drains will be connected to the existing drainage systems already servicing the project area. Adequate soil erosion and sedimentation control measures will be employed during project activities.

The sealing of water wells and sewer lines for the protection of groundwater quality is ensured by MDOT specifications imposed on the contractor.

There are no major drainage features, streams, rivers, wetlands, or fisheries along this project or affected by this project.

Section 4
MITIGATION OF IMPACTS

There are no negative impacts expected and, thus, no mitigation required in the following categories: Coastal Barrier Resources, Coastal Zone Management, Farmland Protection, Fish and Wildlife Coordination, Floodplains, Wetlands, Wild and Scenic Rivers, Air Quality, Endangered Species, Noise, Historic Preservation, or Section 4(f).

4.1 Mitigation of Construction-Related Impacts

The goal of mitigative measures is to preserve, to the greatest extent possible, existing neighborhoods, land use, and resources, while improving transportation. Although some adverse impacts are unavoidable, especially during the construction itself, the City of Wyoming and the Kent County Road Commission take precautions during design and construction to protect as many social and environmental systems as possible. Construction activities that include mitigation measures being considered at this time are listed below. Further agency coordination will continue through the design stage. Construction sites will be reviewed to ensure that the mitigation measures proposed are carried out, and to determine if additional protection is required.

4.1.1 Soil Erosion and Sedimentation Control

Accelerated sedimentation caused by highway construction will be controlled through the use of temporary erosion and sedimentation control measures. These items will be included on the design plans and may include siltation fence, mulch, seeding, sod, and siltation fabric on inlets. New catch basins will have sumps to collect sediment. New catch basin inlets will be protected during construction to prevent sediment from entering the enclosed system.

4.1.2 Existing Vegetation

Although some tree removal will be necessary, the existing natural and ornamental vegetative cover will be retained wherever possible within the right of way. Where the existing ground cover must be removed, replacement vegetation will be established in a timely manner using seed and mulch or sod.

Where trees are to be removed from in front of residences, property owners will be given appropriate notice and will be offered replacement trees to help offset the functional or aesthetic loss of the trees.

4.1.3 Disposal of Surplus or Unsuitable Material

Disposal of surplus or unsuitable material will be done as to control the possible detrimental impacts of such actions. The material, per construction specifications, cannot be disposed in any public or private wetland area, watercourse, or designated floodplain without prior approval and necessary permits from appropriate resource agencies. All regulations of the MDEQ governing disposal of solid wastes must be complied with.

4.1.4 Maintaining Traffic During Construction

Disruption of traffic in the construction area will be minimized to the extent possible. Although control of all construction-related inconveniences is not possible, signing all construction areas will ensure motorist and pedestrian safety. Access will be maintained to properties adjacent to 44th Street.

4.1.5 Continuance of Public Utility Service

Water, sanitary sewer, gas, telephone, and electrical transmission lines adjacent to or crossed by the project may require relocation or adjustment. If this should be the case, coordination will take place during the design phase and relocation will take place prior to construction of the road if possible.

4.1.6 Construction Noise Levels and Vibration Impacts

Construction noise will be minimized by measures such as requiring that construction equipment have mufflers, that portable compressors meet federal noise-level standards for that equipment, and that all portable equipment be placed away from or shielded from sensitive noise receptors if at all possible. All local ordinances will be adhered to. Care will be taken to prevent vibration damage to adjacent structures.

4.1.7 Control of Air Pollution During Construction

During the construction of this project, the Contractor shall maintain adequate dust control measures so as not to cause detriment to the safety, health, welfare, or comfort of any person or cause damage to any property, residence, or business.

All bituminous plants, Portland cement concrete proportioning plants, and crushing plants shall meet the requirements of the rules of the Michigan Department of Environmental Quality (MDEQ).

4.1.8 Control of Hazardous Materials

All hazardous waste, toxic materials, and/or polluting materials shall be used, stored, and/or disposed of in accordance with applicable federal, state, and local laws and regulations.

4.2 Mitigation for Displacements

Minimization of relocation impacts resulting from right-of-way acquisition will be sought in accordance with the regulations found in the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act, of 1970 as amended, PA 87 of 1980, PA 31 of 1970, and PA 295 of 1966. Appendix D contains the Conceptual Right of Way Relocation Plan. Relocation assistance will be provided for all eligible people displaced.

Section 5
SECTION 4(f) EVALUATION

5.1 Proposed Action

The recommended alternative is to widen 44th Street west of Division Avenue from the existing four lanes to six lanes. This will be accomplished by adding a lane on the outside of the existing pavement both eastbound and westbound. East of Division Avenue, the recommended alternative is to retain four lanes but to widen in order to add a median. The proposed improvements are shown in Figures 1 through 7 on pages 3 through 9. The purpose of the improvement is to reduce traffic congestion and improve safety.

5.2 Section 4(f) Property

Home Acres Park is on the south side of 44th Street east of Division Avenue. Home Acres Park, a community park, is shown on Figure 4. The park consists of a ball diamond. There are no planned facilities to be added to the park. Access is from 44th Street or the parallel street to the south of 44th Street.

5.3 Impacts on the Section 4(f) Property

There is no right-of-way required from the park.

There is no increase in noise levels in the park. The projected traffic volumes on 44th Street near the park are not expected to increase from existing levels due to the construction of M-6 on the southside of the greater Grand Rapids area. Additionally, the widening is taking place away from the park so that traffic lanes are not being moved any closer to the park. The noise analysis shows that noise levels will not increase and the existing function of the park will not be impaired. Therefore, there are no proximity impacts to the park.

5.4 Avoidance Alternatives

The alignment of the roadway was shifted to the north, away from the park, to avoid any direct or proximity impacts.

5.5 Coordination

Coordination with public official having jurisdiction over the park took place in the development of the recommended alternative in order to ensure there were no direct or proximity impacts.

The conclusion is that the feasible and prudent changes already incorporated in the recommended alternative sufficiently avoid any direct or proximity impacts to the park, including during construction.